

X-Twin DIY Aero System

RCMW takes a closer look at these indoor, or fine weather outdoor, self-assembly models for beginners to radio control flying or enthusiasts



It's A Kit!

As the X-Twin™ Ready-To-Fly mini R/C aeroplanes have become firmly established with serious indoor model flyers around the country, it has become increasingly clear that many modellers see considerable potential to develop different styles using Silverlit® hardware. You only have to visit the Flying Toys website to find out (see Contacts) and click on 'Gallery'.

To allow newcomers to easily experience the enjoyment of building their own choice of model subject, Flying Toys have introduced the X-Twin DIY Aero System, offering five different series of designs to suit both beginners and traditional model enthusiasts.

There are ten pre-fabricated kits in the range, each with its own informative step-by-step assembly manual, and featuring simple to assemble and fly single motor Easy Sets, Basic kits, Standard and Advanced Twins, and the Professional set incorporating four powerful electric motors.

Charging direct from the transmitter's built-in charger in less than half an hour can provide controlled flights of around 10 minutes between charges (dependant upon throttle usage) as each model is fitted with its own 3.7 volt LiPo battery. All the X-Twin DIY series models are available on 27 MHz bands A, B and C, to allow up to three different Silverlit models to be flown together at the same time.

Included in the attractive new style gift box packaging is an informative assembly and flight manual, two spare propellers and all you need to take-off within minutes of opening the box, with no glue required.

In addition to the X-Twin you will need to purchase 6 x AA Alkaline batteries for the integral transmitter/charger provided.

black lead to the left. Each motor comes with a prop fitted and is mounted on a plastic plate.

This is held in place with a similar plate on the top of the wing and these clip together. Both the props protrude through a slot in the wing on this X-Twin DIY jet-style model.

The receiver and blue 200 mAh LiPo battery pack come as two modules and are simply assembled as shown. An On-Off switch and motor lead socket are mounted to the left side with a charge socket, frequency band selector switch and the second motor lead socket on the other. The now single unit passes through the fuselage and is held with a retainer plate each side that lock together. The single stranded copper-coated aerial wire runs the length of the fuselage and is held with tape.

Finally a carbon fibre square spar is added that simply clips into the motor mounts, and carbon wing struts; one to each side that clip into the motor and fuselage, while a wire undercarriage with two tiny wheels clip in place. It takes longer to write about it than it takes to build it!

After a short charge from the integral transmitter charger the 'jet' is ready to fly.

Flying

Using the supplied simple 2-channel radio the power was first tested before a flight was attempted. It seemed to have plenty, and a taxi test on hard ground proved that a take off from a hard surface would be possible. Proportional power is provided by twin pusher electric motors turning contra-rotating props enabling straight and level flight, and therefore taking off from a floor in a large hall should be no problem either. A trim control on the transmitter enables trim balance of the two motors for straight-line flight.

The test flight was carried out on a very calm day outdoors, and with a little over half power applied a simple hand launch was all that was required to get the King Hawker into the air and away.

Due to the integral incidence of the wings and motors, the throttle is used for maintaining height, so the less power applied results in less height; increase the power to climb. Shut the power off and the model will descend rapidly in a steep glide. Turns are carried out using the right control stick which is a proportional speed control operating two individual ESCs in the sealed receiver unit. The turns are quite effective and the model will invert and dive if over-controlled. A careful balance of throttle and turning control is required to maintain a steady flight. Over-exuberant use of the controls will result in the model stalling, but after a few minutes of cautious flying it can be mastered and quite entertaining to fly, and even capable of some basic aerobatics too!

'five different series of designs'

Simple Assembly

The example tested here is the Advanced Series 'King Hawker' – a jet-type aeroplane. All the components are packed individually in a moulded plastic tray, and are easily identified from details in the instruction manual. This is a profile model and each airframe part is made from EPP foam, pre-coloured in a military style and has cutouts pre-cut that are simply pushed out.

The wings are fitted first and there are three special 'T' pieces that fit into the slot, while the wing featuring a re-shaped aerofoil section simply slides into the pre-cut slot and is held in place with pieces of clear adhesive tape supplied. The tailplane fits in a similar manner. The motors are then installed with the red and



Open the box and see the parts



All components are neatly packed

Easy Set:

This features a single geared motor and rudder control only. Three styles and colour schemes are available.

Basic Set:

The X-Twin DIY Basic Radio Control Plane Set is a twin boom design self-assembly model. The aeroplane features separate receiver and battery modules that could easily be fitted into your own custom design R/C aircraft if desired. Proportional power is provided by twin pusher electric

motors with accurate steering created using differential thrust. This R/C airplane kit requires just simple, straightforward assembly with full step-by-step instructions included. The high capacity 3.7 V LiPo flight battery is easily charged in around 20-30 minutes from the transmitter's built in charger and provides a flight duration of around 10 to 15 minutes depending upon throttle use. Available in a choice of three colours.

Standard Set:

Being similar in specification to the Basic Set, but with the addition of a durable biplane airframe. Twin motors with proportional throttle control, and steering by differential thrust. Two styles and colour schemes available.

Aero System Advanced Set:

The Advanced aeroplane has dramatic jet styling so this model is a real performer and is the perfect choice for the aspiring Top Gun pilot! The proportional power is provided by twin pusher electric motors with accurate steering created using differential thrust.

Four styles and colour schemes available.

Aero System Professional Set:

This model features 4-motor functionality for even more fun!

The proportional power is provided by the electric motors with tractor propellers, and like the others in the series has accurate

differential thrust steering control. This lightweight model is manufactured from crash resistant materials and requires straightforward assembly. Available in two styles and colour schemes.

RCMW



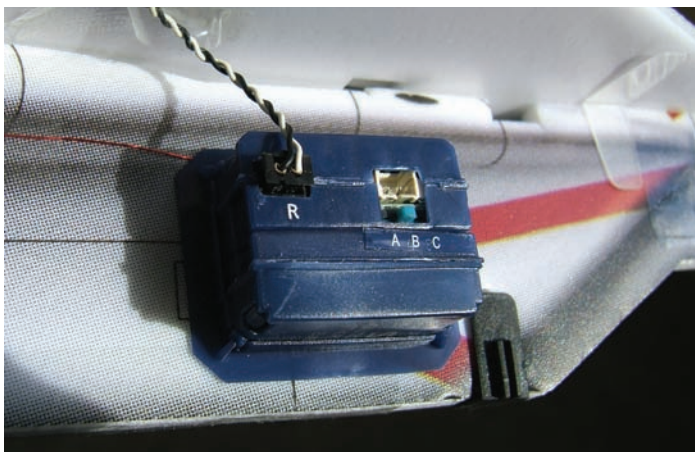
The main structural shaft and two outrigger shafts stiffen the assembly



'T' shape fixture clips stabilise the wings and tailplane



All the plastic components fit neatly into pre-cut holes



The main power module slides into place and is retained by two power module frames



King Hawker in flight

SPECIFICATION

INFORMATION

Name: X-Twin DIY Aero System
Manufacturer: Silverlit Electronics
Distributor: Flying Toys Ltd
Price UK: From £24.99 to £39.99 each

GENERAL SPECIFICATION

Flight Battery: High capacity 3.7 V Lithium Polymer battery
Charger: Integral field charger/transmitter
Charging Time: 20-30 minutes for full charge.
Range: Up to 100 m (300 ft)
Ages: 8+. Adult supervision recommended
 Intelligent charger incorporates LED charging indicator and auto shut off facility when battery is charged.
 Sophisticated wing design, for maximum stability for the inexperienced pilot.
 Fly indoors in a large hall, or outside in calm conditions.
 Made of tough, flexible EPP foam, to absorb impact from a heavy landing.
 R/C easily removed for your own scratch built designs

Contact Details

Flying Toys

www.flyingtoys.com
 01702 29511

**NEXT MONTH:
OVER £3000.00
WORTH OF PRIZES**

YOU can be a our Best-Ever Competition

**ORDER JANUARY'S EDITION OF YOUR FAVOURITE MAGAZINE NOW
FOR THIS GREAT OPPORTUNITY TO WIN GREAT VALUE PRIZES**

To celebrate our landmark 25th year RCMW has a fantastic array of prizes

Take a look at all this! Just some of the great prizes waiting to be won. (Except the young lady!)



Be Uplifted! In these days of gloomy headlines, join us as we celebrate 25 years of Radio Control Model World.

Next month's edition will be our 300th and to mark this auspicious occasion we, together with valued trade partners, have organised this fantastic competition with top quality prizes from some of the best known names in modelling. There are prizes here for all skill levels and a variety of interests.

The RCMW team appreciates the generosity of our prize donors

1st Prize



▲
The Spektrum DX7 2.4 GHz Transmitter is the 1st prize in our competition. It is supplied with four digital servos, switch harness and fittings. Supplied by Horizon Hobby UK. Value: £269.99

Winner In FREE

Also from Horizon Hobby UK is the Hangar 9 Alpha trainer package complete with the new Spektrum D5e full range sport radio and the Evolution EVO40 sport trainer engine system. This model and engine package is featured on the Traplet DVD: Plane Talking-ARTF. Number DV115 Priced at £9.95. Trainer Package Value: £249.99



Flying Toys have supplied THIRTY of their excellent and innovative models. Six examples of each of the following are in this competition: The Picoo Z MX-1 Supreme; the X-Twin DIY Jet advanced version; the Tandem Z Camouflage Helicopter and the Picoo Z Apache. All of these make for great indoor fun. Total Prize Value: £724.80



Another package, this time a VMAR Escape; a sport aerobatic model that has terrific performance, especially when coupled with the Vmax 52 that is also in the prize. Add to that four standard JRC591 servos and you are almost there! Supplied by MacGregor Industries. Prize Value: £170.00 approx



A Jen 57AR two-stroke engine that has become known for reliability and power. Supplied by Just Engines. Prize Value: £62.99



CML have sent three simulator prizes so you can practice as much as you like on your home computer. Each is complete with a USB Flight Controller (Transmitter) software and instructions. Prize Value: £164.99

From Ben Buckle Models, courtesy of Colin Buckle, a three-channel favourite the Super Sixty. This is a model that many modellers of a certain vintage cut their R/C teeth on when it first appeared! Prize Value: £67.98



Supplied for us by Steve Webb Models This 41 inch (1040 mm) span model is a scale park flyer. Built from top quality plywood and balsa it has World Model's Light Tex covering. This combination produces a tough model with an excellent load to weight ratio meaning it is ready for power upgrades. Prize Value: £152.99

New tools are always welcome and some of the best abrading ones are from Perma-Grit who have supplied a prize of a roll wallet with five different shaped tools. These work equally well on woods and soft metal. Prize Value: £39.99



Traplet Publications have offered two packs of five assorted DVD productions (those supplied may differ from samples shown) so you can enjoy modelling entertainment at home. Prize Value £115.00 approx. Also from Traplet come ten Multiplex MPX Fox mini gliders. These have been featured in RCMW and can be readily converted to electric power in various ways. Prize Value: £79.90



The Christmas Tool Kit comprises the Dremel 300 Series multi-tool, a flexible shaft attachment, cutting guide attachment, line and circle cutter attachment, SpeedClic accessory starter set, 12-in-1 Minitool, mini accessory cases with 79 pieces, a tool case and welcome poster. With this kit you are eligible to enter the online Treasure Hunt competition with the opportunity to win even more prizes. Prize Value: £69.99



Two servos for larger loads from J.Perkins Distribution. These are the SRGV9051 high torque metal geared items that give 13.0 kg – cm at 4.8 V and 14.6 kg – cm at 6 V. Weighing just 49 g they measure 40.5 x 20 x 42 mm. Prize Value: £39.98



Graupner GmbH & Co HG have supplied two EDF models and a range of chargers for our grand competition; a pair of Ultramat 14 +LiPo Balancer 5plus combos, an Ultramat 16 and Ultramat 17+LiPo Balancer 5plus combo. The aircraft are a Semi Scale Eurofighter EDF and a GF-35 Semi Scale EDF. Total Prize Value: £570.83

Logic-RC is a relatively new name to modellers as suppliers of excellent equipment. They have supplied a Fusion Typhoon L50B Pro charger and integrated balancer. This versatile unit handles Li-Ion, LiPo, Li-Fe batteries as well as NiCad, NiMH and lead acid units and would be a welcome addition to the workshop. Prize Value: £54.99